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PATENT 7251/94662 P-162 DZ 02SEP2009/2

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Mail et al.)
For: OPTIMALLY ADAPTING MULTIMEDIA CONTENT FOR MOBILE SUBSCRIBER DEVICE PLAYBACK))))
Serial No.: 10/589,417))
371(c) Date: 7 November 2006)) `
Group Art Unit: 2442)) `
Examiner: Michael W. Chao)))

AMENDMENT AND REPLY TO OFFICE ACTION UNDER 37 CFR §1.116

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir or Madam:

In reply to the Final Office Action mailed 6 July 2009, kindly amend the application as follows:

AMENDMENTS TO CLAIMS

Claim 1 (previously presented): A method for distributing multimedia content, the method comprising:

storing an item of multimedia content as stored multimedia content; firstly transcoding said multimedia content for playback on a first multimedia device, thereby producing a firstly transcoded version of said multimedia content;

generating a content ID of said firstly transcoded version of said multimedia content;

storing said content ID of said firstly transcoded version of said multimedia content, as a stored first content ID, in association with said stored multimedia content;

receiving an instruction to forward said item of multimedia content to a second multimedia device, said instruction comprising a copy of said firstly transcoded version of said multimedia content; and

performing the following in response to said instruction:

accessing said stored content using said stored first content ID of said firstly transcoded version of said multimedia content, said accessing comprising:

generating a received content ID of said copy of said firstly transcoded version of said multimedia content; and looking up said stored multimedia content by comparing said received content ID with said stored first content ID; and

transcoding said stored multimedia content for playback on said second multimedia device.

Claim 2 (previously presented): A method according to claim 1 wherein said storing an item of multimedia content comprises storing said item of multimedia content at a multimedia message center (MMSC).

Claim 3 (previously presented): A method according to claim 1 wherein said storing an item of multimedia content comprises storing said item of multimedia content together with an original content identifier (ID) identifying said content.

Claim 4 (previously presented): A method according to claim 1 wherein said storing an item of multimedia content comprises storing said item of multimedia content together with an original content identifier (ID) that uniquely identifies said content.

Claim 5 (previously presented): A method according to claim 1 wherein said storing an item of multimedia content comprises storing said item of multimedia content in its original form.

Claim 6 (previously presented): A method according to claim 1 wherein said storing an item of multimedia content comprises storing said item of multimedia content such that said content may be partly or wholly reconstituted.

Claim 7 (original): A method according to claim 3 and further comprising receiving said original content ID from a provider of said content.

Claim 8 (original): A method according to claim 3 and further comprising generating said original content ID by applying either of a predefined hashing method and a predefined fingerprinting method to said content and using either of the resulting hash and fingerprint as said original content ID.

Claim 9 (previously presented): A method according to claim 3 and further comprising associating said original content ID with different transcoded versions of said content.

Claim 10 (original): A method according to claim 1 and further comprising sending a notification to said first multimedia device indicating that said content is available for download to said multimedia device.

Claim 11 (original): A method according to claim 1 and further comprising delivering said firstly transcoded content to said first multimedia device.

Claim 12 (original): A method according to claim 1 and further comprising delivering said firstly transcoded content to said first multimedia device together with any of said content IDs.

Claim 13 (previously presented): A method according to claim 11 and further comprising:

receiving said firstly transcoded content from said first multimedia device; and

regenerating said content ID of said firstly transcoded content.

Claim 14 (original): A method according to claim 13 wherein said regenerating step comprises regenerating said content ID of said firstly transcoded content using the same method used to generate said content ID of said firstly transcoded content.

Claims 15 - 16 (cancelled)

Claim 17 (original): A method according to claim 1 and further comprising protecting any of said transcoded content with a content protection key (CPK).

Claim 18 (original): A method according to claim 1 and further comprising:

identifying any rights associated with providing said content to any
of said multimedia devices;

generating at least one entitlement as a function of said rights; and providing said content to any of said multimedia devices in accordance with said entitlement.

Claim 19 (currently amended): A method according to claim $\underline{1}$ [[16]] and further comprising:

determining if said copy of said firstly transcoded content is protected;

if said copy is protected, determining if said content may be forwarded to said second multimedia device as indicated by any rights associated with either of said content and the recipient of said firstly transcoded content; and

if said content may be forwarded, protecting and forwarding said secondly transcoded content to said second multimedia device.

Claim 20 (original): A method according to claim 19 and further comprising protecting said secondly transcoded content with a content protection key (CPK) associated with said secondly transcoded content.

Claim 21 (original): A method according to claim 19 wherein said first determining step comprises determining that said copy of said firstly transcoded content is protected by identifying a CPK stored in association with the content ID.

Claims 22 - 25 (cancelled)

Claim 26 (previously presented): A multimedia content distribution system comprising:

an MMS server;

an MMS relay;

a transcoder; and

a DRM server,

wherein said MMS server, MMS relay, transcoder, and DRM server are individually or cooperatively operative to:

store an item of a multimedia content as stored multimedia content;

firstly transcode said multimedia content for playback on a first multimedia device, thereby producing a firstly transcoded version of said multimedia content;

generate a content ID of said firstly transcoded version of said multimedia content;

store said content ID of said firstly transcoded version of said multimedia content, as a stored first content ID, in association with said stored multimedia content;

receive an instruction to forward said item of multimedia content to a second multimedia device, said instruction comprising a copy of said firstly transcoded version of said multimedia content; and

perform the following in response to said instruction:

access said stored content using said stored first content ID of said firstly transcoded version of said multimedia content, comprising:

generating a received content ID of said copy
of said firstly transcoded version of said multimedia content; and
looking up said stored multimedia content by
comparing said received content ID with said stored first content ID; and
transcode said stored multimedia content for playback
on said second multimedia device.

Claim 27 (original): A system according to claim 26 wherein any of said MMS server, MMS relay, transcoder, and DRM server are individually or cooperatively operative to track to whom said content is sent and with what rights.

Claim 28 (original): A system according to claim 26 wherein said DRM server acts as either of a probe and a proxy between any of said MMS server, said MMS relay, and said transcoder.

Claim 29 (previously presented): A system for distributing multimedia content, the system comprising:

means for storing an item of a multimedia content as stored multimedia content;

means for firstly transcoding said multimedia content for playback on a first multimedia device, thereby producing a firstly transcoded version of said multimedia content;

means for generating a content ID of said firstly transcoded version of said multimedia content;

means for storing said content ID of said firstly transcoded version of said multimedia content, as a stored first content ID, in association with said stored multimedia content;

means for receiving an instruction to forward said item of multimedia content to a second multimedia device, said instruction comprising a copy of said firstly transcoded version of said multimedia content; and

means for performing the following in response to said instruction:

accessing said stored content using said stored

first content ID of said firstly transcoded version of said multimedia content, said accessing comprising:

generating a received content ID of

said copy of said firstly transcoded version of said multimedia content; and

looking up said stored multimedia

content by comparing said received content ID with said stored first content ID; and

means for transcoding said stored multimedia content for playback on said second multimedia device.

Claim 30 (original): A system according to claim 29 wherein said means for storing is operative to store said item of multimedia content at a multimedia message center (MMSC).

Claim 31 (original): A system according to claim 29 wherein said means for storing is operative to store said item of multimedia content together with an original content identifier (ID) identifying said content.

Claim 32 (original): A system according to claim 29 wherein said means for storing is operative to store said item of multimedia content together with an original content identifier (ID) that uniquely identifies said content.

Claim 33 (original): A system according to claim 29 wherein said means for storing is operative to store said item of multimedia content in its original form.

Claim 34 (original): A system according to claim 29 wherein said means for storing is operative to store said item of multimedia content such that said content may be partly or wholly reconstituted.

Claim 35 (original): A system according to claim 31 and further comprising means for receiving said original content ID from a provider of said content.

Claim 36 (original): A system according to claim 31 and further comprising means for generating said original content ID by applying either of a predefined hashing system and a predefined fingerprinting system to said content and using either of the resulting hash and fingerprint as said original content ID.

Claim 37 (original): A system according to claim 29 and further comprising means for associating said original content ID with different transcoded versions of said content.

Claim 38 (original): A system according to claim 29 and further comprising means for sending a notification to said first multimedia device indicating that said content is available for download to said multimedia device.

Claim 39 (original): A system according to claim 29 and further comprising means for delivering said firstly transcoded content to said first multimedia device.

Claim 40 (original): A system according to claim 29 and further comprising means for delivering said firstly transcoded content to said first multimedia device together with any of said content IDs.

Claim 41 (previously presented): A system according to claim 39 and further comprising:

means for receiving said firstly transcoded content from said first multimedia device; and

means for regenerating said content ID of said firstly transcoded content.

Claim 42 (original): A system according to claim 41 wherein said means for regenerating is operative to regenerate said content ID of said firstly transcoded content using the same system used to generate said content ID of said firstly transcoded content.

Claims 43 - 44 (cancelled)

Claim 45 (original): A system according to claim 29 and further comprising means for protecting any of said transcoded content with a content protection key (CPK).

Claim 46 (original): A system according to claim 29 and further comprising:

means for identifying any rights associated with providing said content to any of said multimedia devices;

means for generating at least one entitlement as a function of said rights; and

means for providing said content to any of said multimedia devices in accordance with said entitlement.

Claim 47 (currently amended): A system according to claim <u>29</u> [[44]] and further comprising:

means for determining if said copy of said firstly transcoded content is protected;

means, responsive to said copy being protected, for determining if said content may be forwarded to said second multimedia device as indicated by any rights associated with either of said content and the recipient of said firstly transcoded content; and

means, responsive to said content being forwardable, for protecting and forwarding said secondly transcoded content to said second multimedia device.

Claim 48 (original): A system according to claim 47 and further comprising means for protecting said secondly transcoded content with a content protection key (CPK) associated with said secondly transcoded content.

Claim 49 (original): A system according to claim 47 wherein said first means for determining is operative to determine that said copy of said firstly transcoded content is protected by identifying a CPK stored in association with the content ID.

Claims 50 - 57 (cancelled)

Claim 58 (previously presented): A method according to claim 1 and wherein said generating a content ID of said firstly transcoded version of said multimedia content comprises:

applying either of the following to said firstly transcoded version of said multimedia content, and producing a result:

a predefined hashing method; and a predefined fingerprinting method; and using said result as said content ID. Claim 59 (previously presented): A method according to claim 1 and wherein said generating a received content ID of said copy of said firstly transcoded version of said multimedia content comprises:

applying either of the following to said copy of said firstly transcoded version of said multimedia content, and producing a result:

a predefined hashing method; and a predefined fingerprinting method; and using said result as said received content ID.

Claim 60 (previously presented): A method according to claim 58 and wherein said generating a received content ID of said copy of said firstly transcoded version of said multimedia content comprises:

applying either of the following to said copy of said firstly transcoded version of said multimedia content, and producing a result:

a predefined hashing method; and a predefined fingerprinting method; and using said result as said received content ID.

REMARKS

Applicants have carefully studied the outstanding Official Action. The present amendment is fully responsive to all points of rejection and the application is in condition for allowance. The present amendment amends claims 19 and 47, without cancelling any claims or adding any new claims. As discussed below, this amendment complies with a requirement of form expressly set forth in the pending Office Action and may be entered pursuant to 37 C.F.R. §1.116(b)(1). Entry of this amendment, favorable reconsideration and allowance of the present application are hereby respectfully requested.

The previous office action mailed on 14 November 2008 relied in part on Jones (US 6,697,944), but it was not identified on any IDS or on the form PTO-892 accompanying that office action. In replying to that office action on 10 March 2009, applicants requested that Jones be identified in a Notice of References Cited. Applicants respectfully renew that request at this time.

Claims 1 - 14, 17 - 21, 26 - 42, 45 - 49, and 58 - 60 were pending in the present application before the present amendment.

Thus, claims 1 - 14, 17 - 21, 26 - 42, 45 - 49, and 58 - 60 remain pending in the present application after the present amendment.

Claims 19 and 47 stand objected to under 37 CFR §1.75(c), as being of improper dependent form. Before the present amendment, claims 19 and 47 depended from cancelled claims, due to an inadvertent error in the response to the previous office action. The error in claims 19 and 47 has been corrected by making claims 19 and 47 depend from their respective base independent claims. This already was anticipated by the present Office Action that states concerning claims 19 and 47 that it "is assumed they now depend upon their respective independent claims."

Entry of the amendment is requested, and the objection to claims 19 and 47 is therefore deemed to be overcome.

Claims 1, 3 - 14, 29, 31 - 42, and 58 - 60 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Malik (US Patent 7,003,551), in view of Shen et al (US Published Patent Application 2004/0098463).

Malik describes an e-mail system in which large attachments to e-mail messages can be replaced by pointers to attachment files in an e-mail store.

Shen et al describes a transcoding-enabled caching proxy and method, in which transcoded versions of a content object are cached in accordance with a caching strategy.

The rejection of claims 1, 3 - 14, 29, 31 - 42, and 58 - 60 is respectfully traversed.

Claim 1 recites as follows:

"A method for distributing multimedia content, the method comprising:

storing an item of multimedia content as stored multimedia content;

firstly transcoding said multimedia content for playback on a first multimedia device, thereby producing a firstly transcoded version of said multimedia content;

generating a content ID of said firstly transcoded version of said multimedia content;

storing said content ID of said firstly transcoded version of said multimedia content, as a stored first content ID, in association with said stored multimedia content;

receiving an instruction to forward said item of multimedia content to a second multimedia device, said instruction comprising a copy of said firstly transcoded version of said multimedia content; and

performing the following in response to said instruction:

accessing said stored content using said stored first content ID of said firstly transcoded version of said multimedia content, said accessing comprising:

generating a received content ID of said copy of said firstly transcoded version of said multimedia content; and

looking up said stored multimedia content by comparing said received content ID with said stored first content ID;

and

transcoding said stored multimedia content for playback on said second multimedia device."

Attention is particularly drawn to the following portion of the recitation of claim 1 (emphasis added):

"accessing said stored content using said stored first content ID of said firstly transcoded version of said multimedia content, said accessing comprising: generating a received content ID of said copy of said firstly transcoded version of said multimedia content; and looking up said stored multimedia content by comparing said received content ID with said stored first content ID".

In other words, the stored content (the content stored in the recitation "storing an item of multimedia content as stored multimedia content") is accessed by generating a received content ID and comparing that received content ID with a content ID of a transcoded version of the stored content (since the stored content ID is from the recitation "storing said content ID of said firstly transcoded version of said multimedia content, as a stored first content ID, in association with said stored multimedia content").

The outstanding Office Action, in the last paragraph on page 4 and the first paragraph on page 5, states as follow:

"A person of ordinary skill would have modified the attachment cache of Malik with the transcoding cache of Shen by including support for multiple versions of a media file, and the ability to transcode to a desired format.

It would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify the above invention in order to

provide a more efficient way of delivering content objects to end-users. (Shen paragraph [0059])"

Applicants now respectfully traverse the rejection of claim 1 in detail, by pointing out the following reasons, each of which is sufficient to render claim 1 allowable:

- 1. Applicants respectfully point out that the above-quoted statement from the Office Action is unaccompanied by any indication of a determination of the level of skill of a person of ordinary skill in the art, or an indication of why such a person would have arrived at the present invention. In the absence of such a determination, a finding of obviousness is not proper.
- 2. Applicants respectfully point out that Malik's attachment cache is only capable of finding, in the cache, an attachment which is identical to an attachment in a received e-mail message; Malik's cache would be incapable of finding an attachment in the cache when the attachment in the e-mail message is a transcoded version of an attachment in the cache. Nor does Shen, which deals with caching of transcoded versions of content objects, suggest any mechanism which would overcome this lack in Malik, and which could be combined with Malik in order to produce the present invention as claimed in claim 1.
- 3. Applicants respectfully point out that the rejection of claim 1 is deficient in that in fact the highlighted elements in the following recitation from claim 1, also quoted above, are not found in either Malik or Shen: "accessing said stored content using said stored first content ID of said firstly transcoded version of said multimedia content, said accessing comprising: generating a received content ID of said copy of said firstly transcoded version of said multimedia content; and looking up said stored multimedia content by comparing said received

content ID with said stored first content ID". In this respect, see the above general discussion of the recitation of claim 1.

- 4. Applicants respectfully point out that while the outstanding Office Action asserts that certain portions of the above-quoted recitation from claim 1 are found in Malik or Shen, the outstanding Office Action does not bring any evidence from either Malik or Shen for the following portion of the above-quoted recitation (emphasis added): "accessing said stored content using said stored first content ID of said firstly transcoded version of said multimedia content".
- 5. Applicants respectfully point out that Malik, taken as a whole, teaches that large attachments should be removed from email messages and be replaced by pointers to attachment files in an e-mail store. Claim 1 includes the following recitation (emphasis added): "receiving an instruction to forward said item of multimedia content to a second multimedia device, said instruction comprising a copy of said firstly transcoded version of said multimedia content". Thus, Malik teaches away from the present invention as claimed in claim 1.

Therefore, the present Office Action has failed to make a *prima* facie case of unpatentability of claim 1, and the rejection of claim 1 should be withdrawn.

Claim 1 is therefore deemed allowable.

Claims 3 - 14 and 58 - 60 depend directly or indirectly from claim 1 and recite additional patentable subject matter.

Claims 3 - 14 and 58 - 60 are therefore deemed allowable.

Claim 29 is a system claim parallel to claim 1.

Claim 29 is deemed allowable with reference to the above discussion of the allowability of claim 1.

Claims 31 - 42 depend directly or indirectly from claim 29 and recite additional patentable subject matter.

Claims 31 - 42 are therefore deemed allowable.

Claims 2 and 30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Malik, in view of Shen et al, in view of Warsta et al (US Published Patent Application 2004/0181550).

Warsta et al describes a system and method for providing previously adapted content to requesting network devices.

Claims 2 and 30 are dependent claims, depending respectively from claims 1 and 29, and reciting additional patentable subject matter.

Claims 2 and 30 are therefore deemed allowable with reference to the above discussion of the allowability of claims 1 and 29.

Claims 17 - 21 and 45 - 49 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Malik, in view of Shen et al, in view of Kobata et al (US Published Patent Application 2002/0077986).

Kobata et al describes a system for controlling and managing digital assets, typically over the Internet.

Claims 17 - 21 depend directly or indirectly from claim 1 and recite additional patentable subject matter.

Claims 17 - 21 are therefore deemed allowable with reference to the above discussion of the allowability of claim 1.

Claims 45 - 49 depend directly or indirectly from claim 29 and recite additional patentable subject matter.

Claims 45 - 49 are therefore deemed allowable with reference to the above discussion of the allowability of claim 29.

Claims 26, 27, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Malik, in view of Shen et al, in view of Kobata, in view of Evans et al (US Published Patent Application 2003/0172121).

Evans et al describes a system for providing multimedia messages to incompatible terminals, including transcoding the messages.

Claim 26 is an independent system claim including recitation similar to that discussed above with reference to the rejection of claims 1 and 29. Applicants have studied Evans et al, and find that Evans et al does not remedy any of the deficiencies in the rejection of claims 1 and 29, nor does the position taken in the Office Action's rejection of claim 26 on the points raised in the above discussion of the rejection of claims 1 and 29 differ in material respects from the position taken in the rejection of claims 1 and 29.

Claim 26 is therefore deemed allowable with reference to the above discussion of the allowability of claims 1 and 29.

Claims 27 and 28 depend from claim 26 and recite additional patentable subject matter.

Claims 27 and 28 are therefore deemed allowable.

Applicants have also considered the following references, made of record but not relied upon in the present Office Action:

- US Patent 6,563,517 to Bhagwat et al, which describes a data quality adjusting system, including dynamic adjusting of transcoding parameters, intended to reduce response time in browsing.
- US Patent 6,128,623 to Mattis et al, which describes a highperformance caching system.

The invention as presently claimed is neither described nor suggested in the above-mentioned references, taken either individually or in combination, including combination with the references that were relied upon in the present Office Action.

In the above discussion of the allowability of the claims, and particularly but not exclusively in the above discussion of the allowability of the dependent claims based on the allowability of the respective base claims, discussion of other arguments for allowability of the claims has been omitted in the interest of brevity and clarity. Should a further Official Action issue rejecting one or more claims, Applicant reserves the right to present further arguments.

It is respectfully submitted that the present application is in condition for allowance. Entry of the present amendment, favorable reconsideration and allowance of the present application are respectfully requested.

Respectfully submitted,

2 September 2009

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